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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/831,084 | 05/03/2001 | Michel Blayrac | 33486 | 8373 |
| 116 | 7590 | 02/10/2006 | EXAMINER | |
| PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108 | | | BUTLER, MICHAEL E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3653 | |

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/831,084 | Applicant(s) BLAYRAC ET AL. | |
| | Examiner Michael Butler | Art Unit 3653 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 11-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 11-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action, and apply to this and any subsequent Office Actions.

Priority

1. Applicant's claim of priority as a national stage 371 application of application of PCT/FR99/02723 filed 11/08/1999 which claims priority to French application 9814141 filed 11/10/1998.

Drawings

2. New drawings will be required contingent upon allowance because the drawings were objected to by the draftsman/declared informal by the applicant.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 11-25 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As shielding attenuates rather than rendering gamma and x-ray radiation impermeable, it is not apparent how one would make a box impermeable to radiation.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim(s) 11-25 is/are rejected under 35 U. S. C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant is claiming a result rather than a structure for performing the effect with respect to "impermeable to radiation" in base claims 11 and 23.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 11-12, 16, and 22 are are rejected under 35 U.S.C. 102(b) as being anticipated by

White et al. 4736826 which discloses all the claimed elements including:

(Re: cl 11,23) a control system for remote manipulation in a containment system featuring an onboard radiation protected control means (upper left corner fig 16) onboard power supply (47) central control means (c9 L 29-37; 100 fig 16)
(Re: cl 23) plural processors and redundant power supplies (c3 L 44-c4 L 2; c6 L 5-20; fig 5)
(Re: cl 12) redundant power supplies (c3 L 44-c4 L 2; c6 L 5-20; fig 5)
(Re: cl 16) control box attached to a base (c6 L 16-20 with c 9 L 29-37)
(Re: cl 21, 24) at least one power source supplies all the power for transmission of information (c3 L 44-c4 L 2; c6 L 5-20 and inherent).

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9. Claims 11-12, 14-15, and 21, 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Wada et al. 6275747 which discloses all the claimed elements including:

(Re: cl 11,23) a control system for remote manipulation in a containment system featuring an onboard radiation protected control means (11; c6 L 24-29)
onboard power supply (16)
central control means (c2 l 26-33)
(Re: cl 23) plural processors (c2 L 26-33;c5 L 5-11) and redundant power supplies (c3 L 40-44, memory battery backup)
(Re: cl 12) redundant power supplies (c3 L 40-44, memory battery backup)
(Re: cl 13) plural alternately operating microprocessors (c2 l 26-33)
(Re: cl 14) control system is self configurable (c4 L 22-40)
(Re: cl 15) control system configured for processing and operating responsive to diagnostic errors (c4 L 22-40;c3 L 45-65)
(Re: cl 21, 24) at least one power source supplies all the power for transmission of information (c4 L 57-60; c26-33, also inherent).

10. Claims 11, 16, 18, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Lindequist WO 99/49785 A1 275747 which discloses all the claimed elements including:

(Re: cl 11,23) a control system for remote manipulation in a containment system featuring an onboard radiation protected control means (p14 L 25–p15 L 9)
onboard power supply (p 14 L 25-32)
central control means (p15 L 3-9)
(Re: cl 16) control box attached to a base (48 fig 6)
(Re: cl 18)(16) lead base plate under base of each control box (p18 lead balls; p19 L 7-11)
(Re: cl 19)(16) stainless steel house (p 18) with plexiglass (152; p 18) .

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claim(s) 11-15, and 21-25 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. in view of Silverman et al. 4709265 wherein the former discloses the elements previously discussed and the latter discloses any elements not explicitly or inherently taught by the former including:

(Re: cl 22,25) wherein the control box and the power supply box are each configured to be removably attached to the carrying equipment, wherein the carrying equipment is configured to support the control box and the power supply box when the control box and power supply box are attached to the carrying equipment (318a/b; c6 L55-62).

It would have been obvious at the time of the invention for Wada et al. to use a removable control box and power supply to facilitate replacement or repair of malfunctioning or worn components, upgrade to available advancing componentry, ease of repair, and recharge of batteries.

13. Claim(s) 11-19, 21, and 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindequist et al. in view of Eckerdt et al. (4977329) wherein the former discloses the elements previously discussed and the latter discloses any elements not explicitly or inherently taught by the former including:

(Re: cl 17) power supply locking means (c5 L 3-33).

It would have been obvious at the time of the invention for Lindequist et al. to lock the power supply in place to the base to prevent the supply from sliding away from its connection points or sliding into a pitch-roll unstable center of mass.

14. Claim(s) 11-21, and 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindequist et al. in view of Kim 63557878 wherein the former discloses the elements previously discussed and further suggests:

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(Re: cl 23) plural processors and redundant power supplies (p15 L 6-9)
(Re: cl 17) power supply locking means (robot would be incredibly unstable and electrical connection integrity precarious without some power supply locking in a movable robot);

and the latter discloses any elements not explicitly or inherently taught by the former including:

(Re: cl 20) gaskets for use with covers (c3 L 12-57).

It would have been obvious at the time of the invention for Lindequist et al. to seal the box with shielding gasket attenuate electromagnetic radiation reaching the electronic components as taught by Kim.

15. Claim(s) 11-16, 21, 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. in view of White et al. wherein the former discloses the elements previously discussed and the latter discloses any elements not explicitly or inherently taught by the former including:

(Re: cl 16) control box attached to a base (c6 L 16-20 with c 9 L 29-37)

It would have been obvious at the time of the invention for Wada et al. to use a control box attached to a base removable control box and power supply to facilitate replacement of malfunctioning or worn componentry, upgrade to available advancing componentry, ease of repair, and recharge of batteries.

16. Claim(s) 11-16, 21, 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. in view of Lindquist wherein the former discloses the elements previously discussed and the latter discloses any elements not explicitly or inherently taught by the former including:

(Re: cl 16) control box attached to a base (48 fig 6)

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(Re: cl 18)(16) lead base plate under base of each control box (p18 lead balls; p19 L 7-11)

(Re: cl 19)(16) stainless steel house (p 18) with plexiglass (152; p 18).

It would have been obvious at the time of the invention for Wada et al. to use a control box attached to a base removable control box and power supply to facilitate replacement of malfunctioning or worn componentry, upgrade to available advancing componentry, ease of repair, and recharge of batteries. It would have been obvious at the time of the invention for Wada et al. to use a lead base plate under the base of each control box to shield the components from radiation or identify vision reference points as taught by Lindquist. It would have been obvious at the time of the invention for Wada et al. to use stainless steel in the component box because of the conductive properties nature of the steel form a faraday cage impervious to emf and emp electromagnetic radiation, alpha and beta particle radiation, and stainless steel has greater long term durability against particulate radiation.

17. Claim(s) 11-13, 16, and 21-25 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. in view of Silverman et al. 4709265 wherein the former discloses the elements previously discussed and the latter discloses any elements not explicitly or inherently taught by the former including:

(Re: cl 13) plural alternately operating microprocessors (318a/318b;)

(Re: cl 22, 25) wherein the control box and the power supply box are each configured to be removably attached to the carrying equipment, wherein the carrying equipment is configured to support the control box and the power supply box when the control box and power supply box are attached to the carrying equipment (318a,318b ; c5 L 64-c6 L 62).

It would have been obvious at the time of the invention for White et al. to use a removable control box and power supply to facilitate replacement of malfunctioning or worn

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componentry, upgrade to available advancing componentry, ease of repair, and recharge of batteries.

Response to Amendments/Arguments

18. Applicant's amendment was effective in overcoming the rejections under 35 U.S.C. second paragraph. Applicants's arguments were effective in overcoming the rejections evidenced by White with respect to claims 13-15 and 17, and 19-20.

The applicant's arguments have been fully considered but they are unpersuasive in overcoming the rejections evidenced by White with respect to claims 11-12, and 16. Applicant is claiming a result rather than a structure for performing the effect with respect to "impermeable to radiation" in base claim (11 and new claim 23). The metal box is fully capable of blocking the blockable alpha and beta radiation and serves as a faraday cage regarding emf/emp radiations. Applicant needs claim a structure for performing his task rather claim an ideal or objective. (Re: cl 12) Power supplies connected in parallel are redundant. (Re: cl 16) the access covers and metal skirt access to a control box fixed to the robot base. The anti rotation bracket 67 further fixes the box to the base.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exmr. Michael E. Butler whose telephone number is (571) 272-6937.

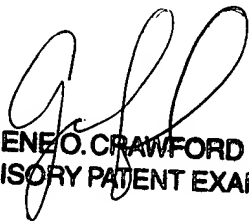
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford, can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael E. Butler
Examiner



GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER